

Released 2008  
Achievement Test

Science

GRADE

6

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This document contains a full release of test items from the 2008 Grade 6 Science Achievement Test.

Released test items, which contained approximately 25% of the total number of test items from previously secured achievement tests, were mailed to school administrators each fall from 2004 to 2006 and have been made available to teachers in only print form because of copyright limitations. **Every second year**, as of the fall of 2007, **a complete test** for all achievement test subjects and grades (except Grades 6 and 9 Social Studies; Grades 3, 6, and 9 Français/French Language Arts; and Grade 9 Knowledge and Employability courses) will be **mailed** to school administrators in conjunction with the assessment highlights report for that year. In this way, teachers will receive complete forms of achievement tests. The parts of those tests that are released in print form for which electronic copyright permission is received will subsequently be posted on the Alberta Education website. A test blueprint and an answer key that includes the difficulty, reporting category, language function, and item description for each test item will also be included. These materials, along with the Program of Studies and subject bulletin, provide information that can be used to inform instructional practice.

Assessment highlights provide information about the overall test, the test blueprints, and student performance on the English form of the Science Achievement Test in Grade 6. Also provided is commentary on student performance at the *acceptable standard* and the *standard of excellence* on selected items from the 2009 Achievement Test. This information is intended for teachers and is best used in conjunction with the multi-year and detailed school reports that are available to schools via the extranet.

**Assessment highlights reports** for all achievement test subjects and grades (except Grades 3, 6, and 9 Français/French Language Arts; and Grade 9 Knowledge and Employability courses) will be **posted on the Alberta Education website every year** in the fall.

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The Alberta Education Internet address is [education.alberta.ca](http://education.alberta.ca).

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## ***2008 Achievement Test Questions***

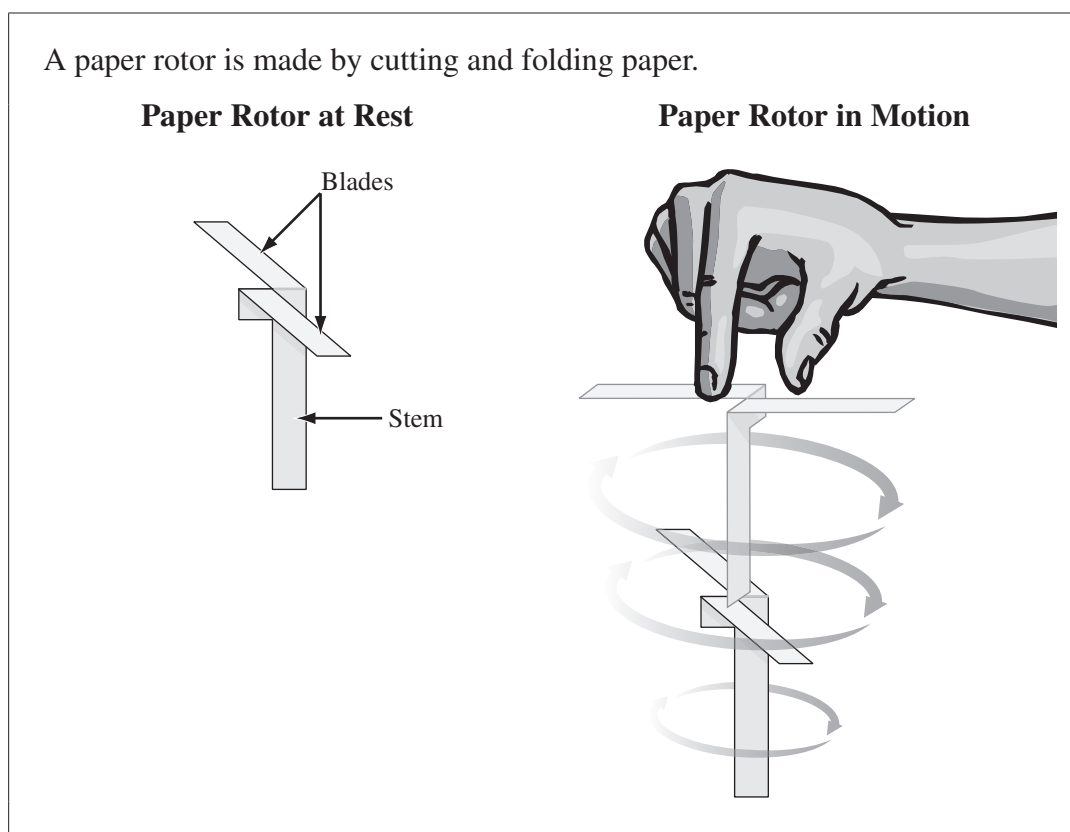
The questions presented in this document are from the previously secured 2008 Grade 6 Science Achievement Test and are representative of the questions that form achievement tests. These questions are released by Alberta Education for teacher and student use.

**Grade 6 Achievement Test**

**2008**

**Science**

Use the following information to answer question 1.



1. Which force causes the downward movement of the paper rotor?
  - A. Gravity
  - B. Thrust
  - C. Drag
  - D. Lift

---
  
2. Which of the following examples **best** illustrates the compression of air?
  - A. Flying a kite
  - B. Inflating a tire
  - C. Blowing out a candle
  - D. Using a vacuum cleaner

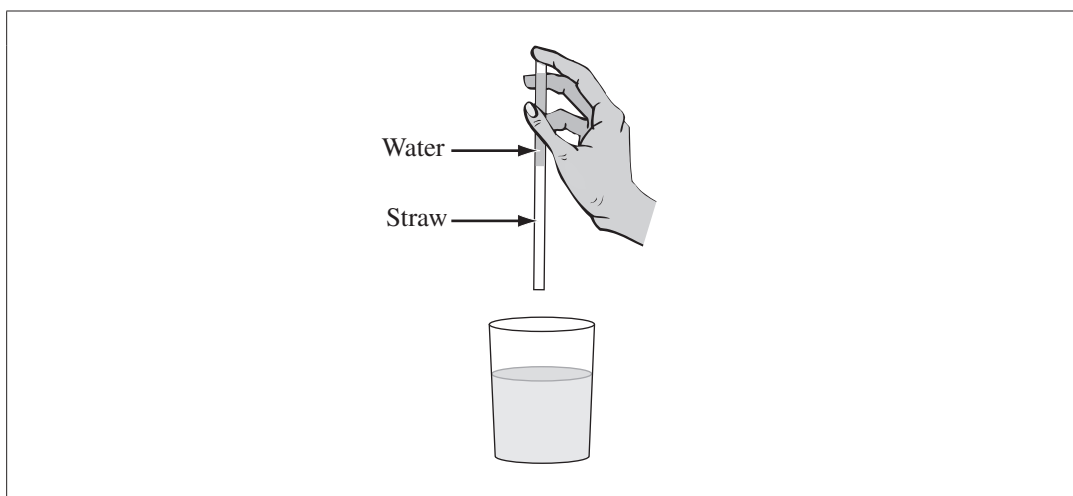
*Use the following information to answer question 3.*

Billy accidentally covered all the air holes on his ant farm during lunch hour.



3. Which of the following statements describes what will happen to the air inside the ant farm as a result of the air holes being covered?
- A. The oxygen concentration and the carbon dioxide concentration will both increase.
  - B. The oxygen concentration and the carbon dioxide concentration will both decrease.
  - C. The oxygen concentration will decrease and the carbon dioxide concentration will increase.
  - D. The oxygen concentration will increase and the carbon dioxide concentration will decrease.

Use the following illustration to answer question 4.



4. As long as the finger is covering the top of the straw, the water will stay in the straw because the air pressure at the
- A. bottom of the straw is greater than the force of gravity
  - B. bottom of the straw is less than the force of gravity
  - C. top of the straw is greater than the force of gravity
  - D. top of the straw is less than the force of gravity
- 
5. The purpose of the fins on a rocket is to
- A. reduce drag
  - B. generate lift
  - C. provide stability
  - D. streamline shape

Use the following information to answer question 6.

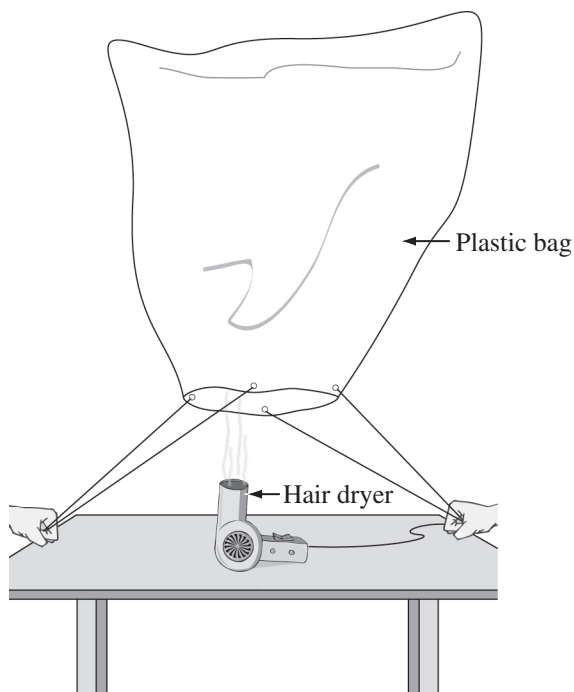
The chart below lists the results of an experiment with parachutes.				
Parachute	Length of shroud lines (cm)	Diameter of air hole in canopy (cm)	Number of paper-clips used as weight	Time to reach ground (s)
1	24	0.5	4	18
2	24	0.5	6	16
3	24	0.5	8	14
4	24	0.5	10	12

6. Based on the information in the chart, which of the following conclusions can be reached?
- A. The larger the hole in the canopy, the slower the parachute will descend.
  - B. The length of the shroud lines has little effect on a parachute's rate of descent.
  - C. Parachutes descend slower as the number of paper-clips attached to them increases.
  - D. Parachutes descend faster as the number of paper-clips attached to them increases.
- 
7. Parachutes cause objects to fall to the ground more slowly because they
- A. increase air resistance
  - B. decrease air resistance
  - C. increase the force of gravity
  - D. decrease the force of gravity

*Use the following information to answer question 8.*

A large plastic bag and a hair dryer are used as a model for a hot-air balloon. When the hair dryer is turned on, it blows hot air into the bag. The moment the hair dryer is turned off, the plastic bag is released and floats upward.


**Model of a Hot-Air Balloon**



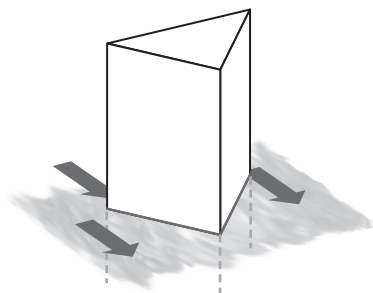
8. The reason that the plastic bag floats upward is that the air
- A. inside the bag is less dense than the air outside the bag
  - B. inside the bag has the same density as the air outside the bag
  - C. molecules inside the bag move more slowly than the air molecules outside the bag
  - D. molecules inside the bag are closer together than the air molecules outside the bag



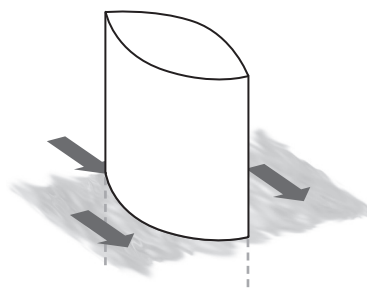
9. An engineer is designing a bridge to cross a fast-flowing river. Which of the following designs for a bridge support would offer the **least** resistance to the water?

 Indicates direction of water flow

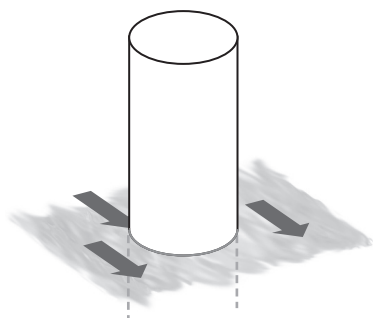
A.



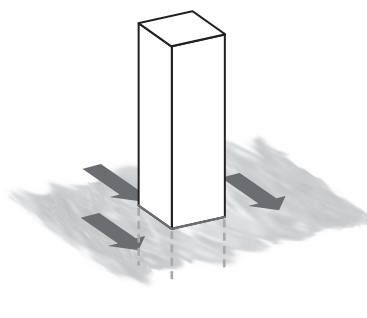
B.



C.



D.

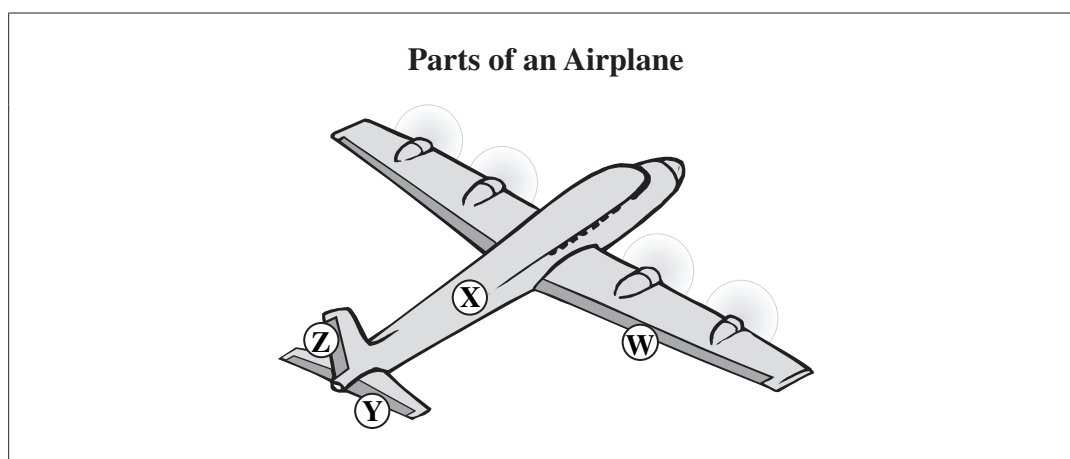


10. Bernoulli's principle states that as the   *i*   of a fluid increases, the pressure exerted by that fluid   *ii*  .

The statement above is completed by the information in row

Row	<i>i</i>	<i>ii</i>
A.	speed	increases
B.	speed	decreases
C.	volume	increases
D.	volume	decreases

Use the following diagram to answer questions 11 and 12.



11. In the diagram above, the part of the airplane that controls yaw is identified by the letter
- A. W
  - B. X
  - C. Y
  - D. Z
12. The part of the airplane that is used to control the up and down movement of the nose of the airplane is identified by the letter
- A. W
  - B. X
  - C. Y
  - D. Z

13. Which of the following control settings causes a model glider to continuously roll to the right while it is flying in a straight line?
- A. The right aileron up, the left aileron down, and the rudder neutral
  - B. The right aileron down, the left aileron up, and the rudder neutral
  - C. The right aileron neutral, the left aileron neutral, and the rudder left
  - D. The right aileron neutral, the left aileron neutral, and the rudder right
14. On an airplane, the rudder is located on the
- A. horizontal stabilizer
  - B. vertical stabilizer
  - C. elevators
  - D. wings

*Use the following information to answer question 15.*

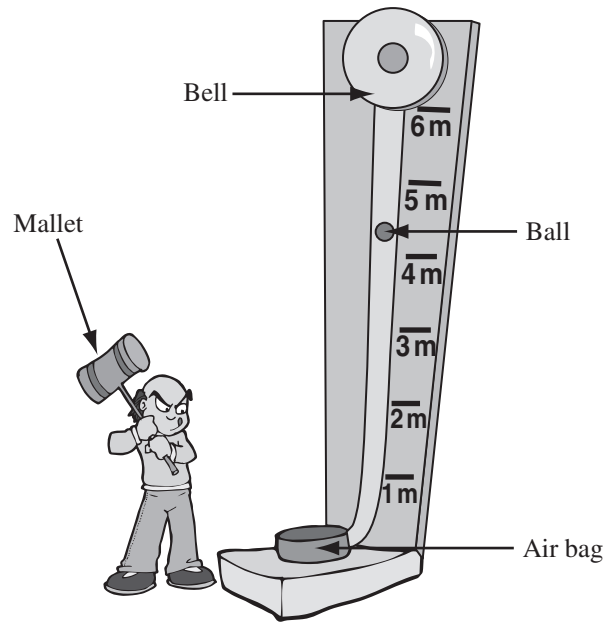
When a student kicks a soccer ball, the air particles inside the ball are compressed for a very short time.

15. An inference that can be made about the air particles inside the soccer ball is that when they are compressed, they
- A. are colder than uncompressed air particles
  - B. have less mass than uncompressed air particles
  - C. have more mass than uncompressed air particles
  - D. are closer together than uncompressed air particles

Use the following information to answer question 16.

A carnival game is shown in the diagram below.

Force exerted by person swinging the mallet (N)	Height of ball (m)
4	1
5	2
7	3
10	4
?	5
?	6



16. According to the table above, how much force must the person swinging the mallet exert in order to ring the bell?
- A. 13 N
  - B. 14 N
  - C. 16 N
  - D. 19 N

Use the following information to answer question 17.

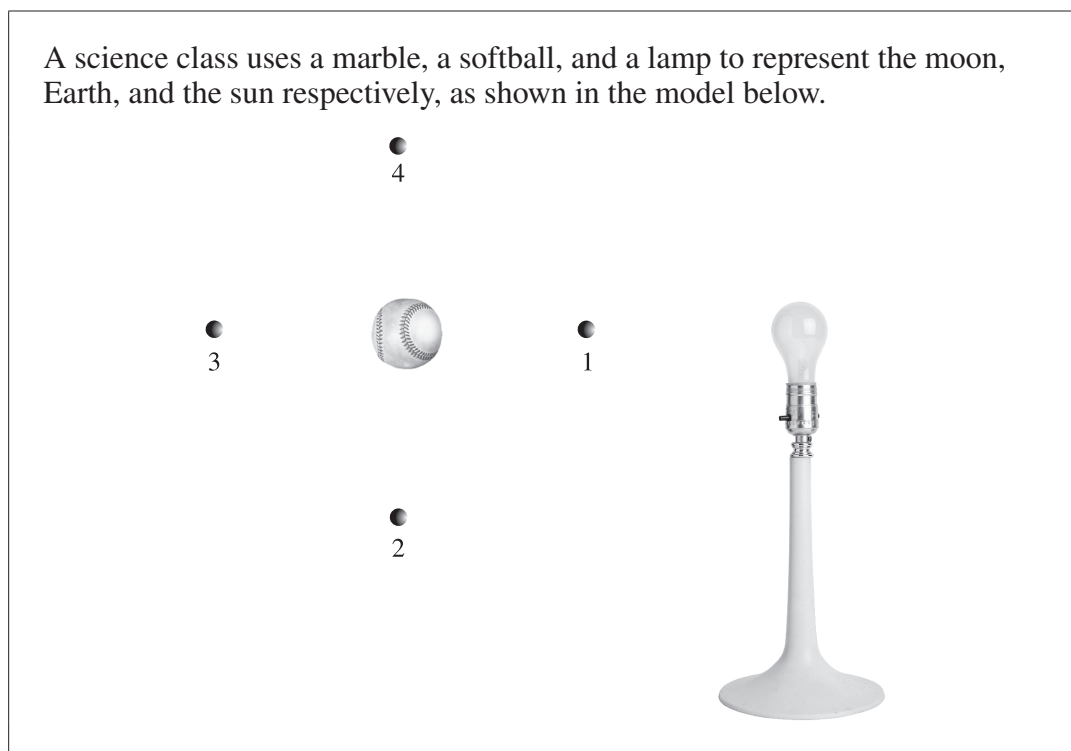
The following chart shows the approximate distance of several planets from the sun and the time required for the planets to revolve around the sun.

<b>Planet</b>	<b>Approximate distance from the sun (million kilometres)</b>	<b>Time required for planet to revolve around the sun (Earth units)</b>
Mercury	58	88 days
Venus	108	225 days
Earth	150	1 year
Jupiter	778	12 years
Uranus	2 871	84 years
Neptune	4 498	165 years

17. It can be inferred from the chart above that the planet Saturn, which is approximately 1 430 million kilometres from the sun, revolves around the sun approximately once every
- A. 3 years  
B. 10 years  
C. 30 years  
D. 100 years
- 
18. The source of light that enables astronomers to see Jupiter through a telescope is
- A. the moon  
B. the sun  
C. Jupiter  
D. Earth

Use the following information to answer question 19.

A science class uses a marble, a softball, and a lamp to represent the moon, Earth, and the sun respectively, as shown in the model below.



19. A solar eclipse would **most likely** be modelled when the marble is in position
- A. 1
  - B. 2
  - C. 3
  - D. 4

20. Which of the following sequences **best** represents the phases of the moon as seen from Earth over the course of one month?

A.



B.



C.



D.



21. From a particular location on Earth, the constellation Orion appears to be in a different position in the sky at 7 P.M., 11 P.M., and 3 A.M. This change in position is due to

- A. the constellation revolving through space
- B. the constellation rotating around the sun
- C. Earth revolving around the sun
- D. Earth rotating on its axis

22. Which of the following planets is **larger** than Earth?

- A. Mercury
- B. Neptune
- C. Venus
- D. Mars

*Use the following table to answer question 23.*

Angle of Sun at Solar Noon and Number of Daylight Hours				
Location	Angle of Sun at Noon (December 21)	Amount of Daylight (December 21)	Angle of Sun at Noon (June 21)	Amount of Daylight (June 21)
1	13°	8 h, 12 min	60°	17 h, 48 min
2	16°	8 h, 31 min	63°	17 h, 29 min
3	19°	8 h, 50 min	66°	17 h, 10 min
4	21°	9 h, 9 min	69°	16 h, 51 min

23. Based on the information in the table above, the **best** prediction of the number of daylight hours that location 3 would have on February 21 is approximately

- A. 17 h
- B. 15 h
- C. 10 h
- D. 8 h



Use the following information to answer question 24.

The position of the Big Dipper changes throughout the year. Its position at midnight in the December night sky is shown below.



**December  
(midnight)**

24. Which of the following rows shows the position of the Big Dipper at midnight in the March, June, and September night sky?

Row	March	June	September
A.			
B.			
C.			
D.			

Use the following information to answer question 25.

A student records the times at which the sun rises and sets over a period of a week.

Day	Time of Sunrise	Time of Sunset
Monday	7:33 A.M.	7:12 P.M.
Tuesday	X	Cloudy
Wednesday	7:37 A.M.	7:08 P.M.
Thursday	Y	7:06 P.M.
Friday	7:41 A.M.	7:04 P.M.
Saturday	7:43 A.M.	Z
Sunday	7:45 A.M.	7:00 P.M.

25. Which of the following rows identifies the times that replace X, Y, and Z in the chart?

Row	X	Y	Z
A.	7:34 A.M.	7:38 A.M.	7:01 P.M.
B.	7:34 A.M.	7:38 A.M.	7:02 P.M.
C.	7:35 A.M.	7:39 A.M.	7:02 P.M.
D.	7:35 A.M.	7:39 A.M.	7:03 P.M.

Use the following information to answer question 26.

To model the phases of the moon, a student uses a globe to represent Earth, a marble to represent the moon, and a flashlight to represent the sun.

**Model I**



Marble



Flashlight

**Model II**



Marble



Flashlight

**Model III**

Marble



Flashlight

**Model IV**



Marble



Flashlight

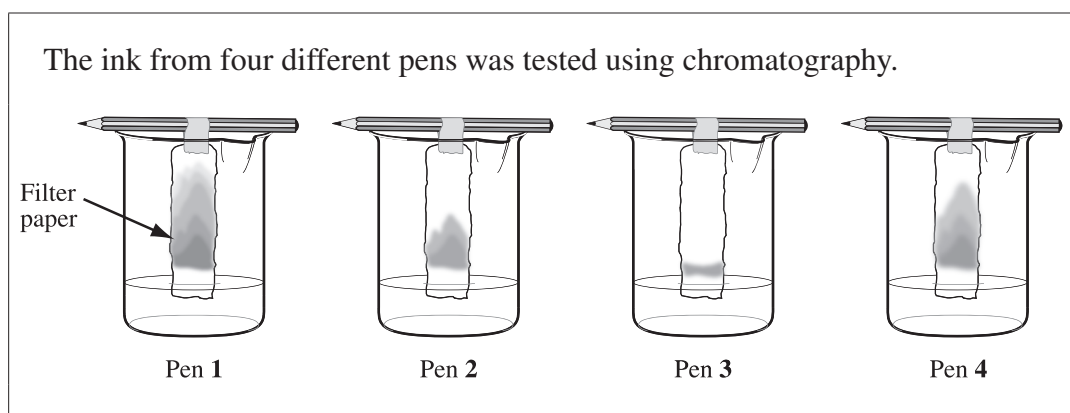
26. In which of the models has the student positioned the marble to represent the moon in its last quarter phase, as observed from Earth?
- A. Model I
  - B. Model II
  - C. Model III
  - D. Model IV
- 

*Use the following table to answer question 27.*

Characteristics of Four Tracks Left by the Same Student		
Track	Description of Imprint	Length of Stride (cm)
I	Heel and toe of the shoe clearly distinguishable	23
II	Heel and toe of the shoe clearly distinguishable	52
III	Only the toe of the shoe distinguishable	23
IV	Only the toe of the shoe distinguishable	52

27. Which track was made by the student when he was walking?
- A. I
  - B. II
  - C. III
  - D. IV

Use the following information to answer question 28.



28. In this experiment, what is the responding variable?

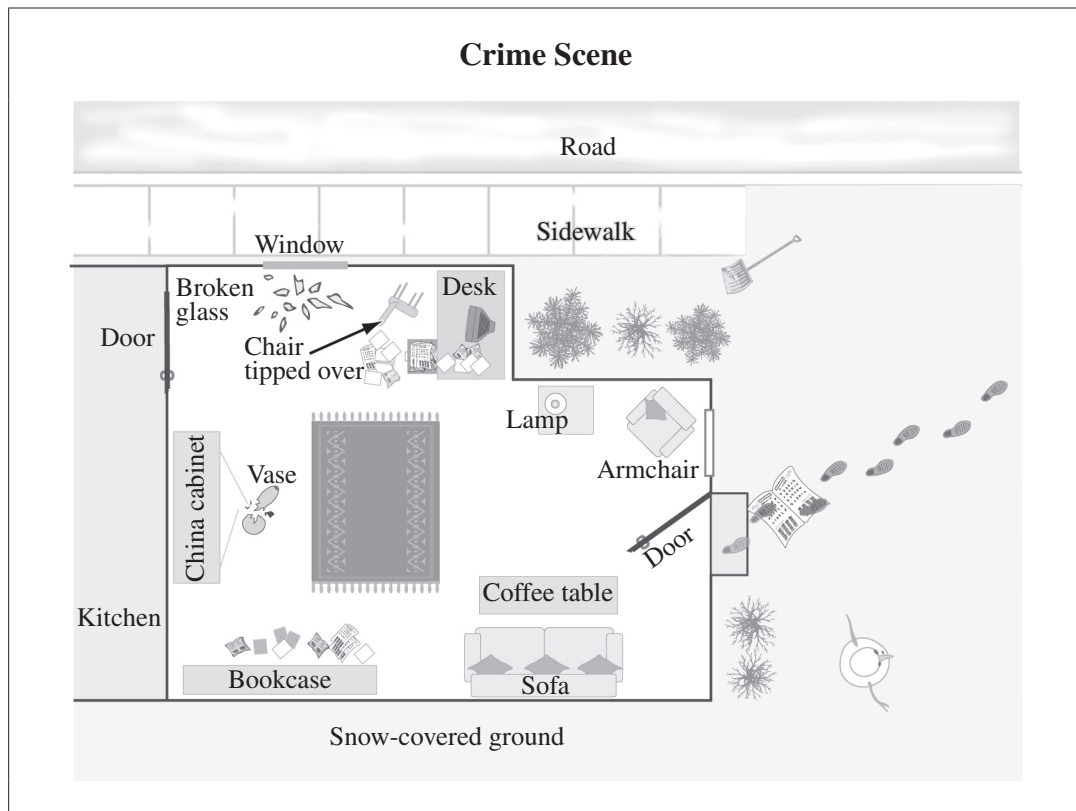
- A. Colour of the pen
- B. Separation of the ink
- C. Thickness of the ink line
- D. Length of the filter paper

29. It is easier to collect fingerprints from a   *i*   surface with   *ii*   powder.

The statement above is completed by the information in row

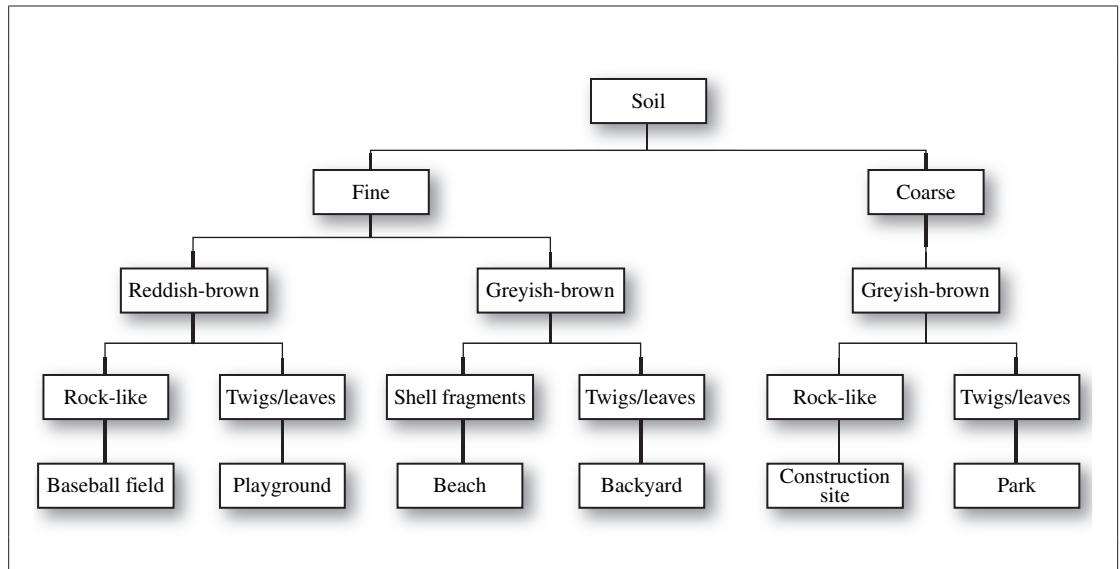
Row	<i>i</i>	<i>ii</i>
A.	light-coloured	white
B.	light-coloured	yellow
C.	dark-coloured	black
D.	dark-coloured	white

Use the following diagram to answer question 30.



30. An observation that can be made about the crime scene above is that the
- A. intruder accessed information from the computer on the desk
  - B. broken vase is on the floor in front of the china cabinet
  - C. intruder dropped a newspaper outside the door
  - D. bookcase was moved

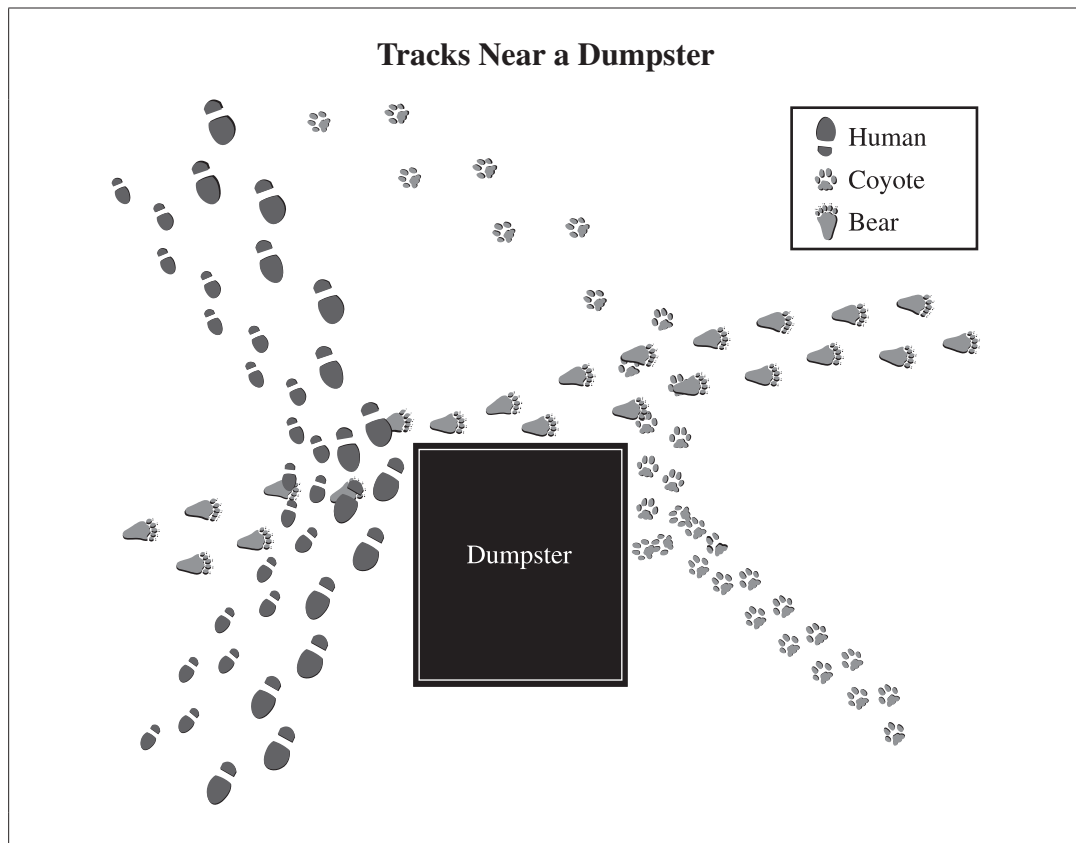
Use the following classification chart to answer question 31.



31. A Science 6 student tracks soil into her house after being outside. The soil is fine with brown, rock-like particles in it. According to the classification chart shown above, where had the student **most likely** been before entering her house?

- A. Beach
- B. Playground
- C. Baseball field
- D. Construction site

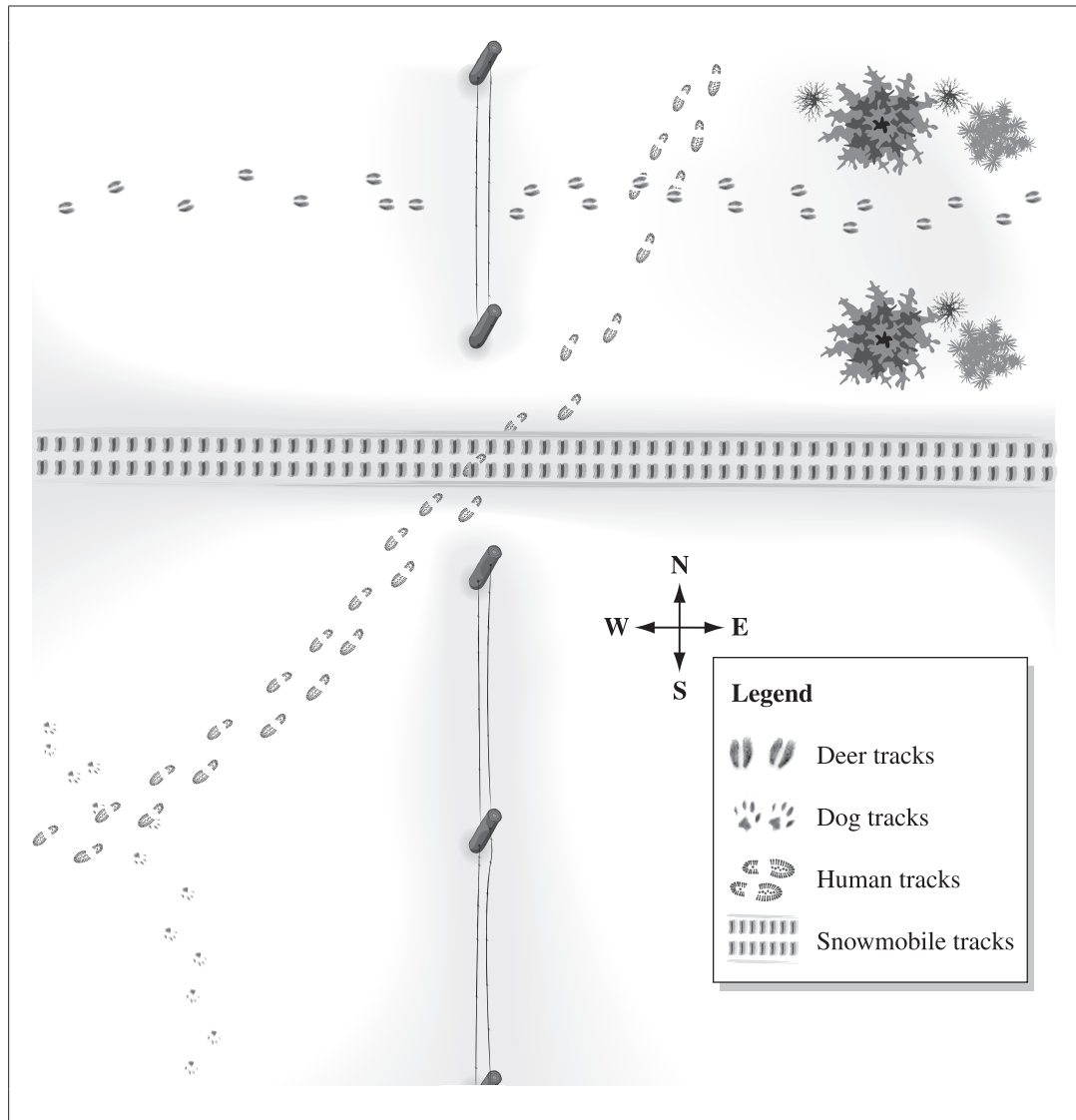
Use the following diagram to answer question 32.



32. An observation that can be made from the diagram above is that the
- A. human tracks were made by two different shoe sizes
  - B. coyote was scared and ran away when it saw the bear
  - C. bear tracks are on top of the coyote and human tracks
  - D. coyote was scared and ran away when it saw the people



Use the following diagram to answer questions 33 and 34.



33. The sequence in which the tracks in the diagram were made, from **earliest** to **latest**, was

- A. dog, snowmobile, human, deer
- B. dog, human, snowmobile, deer
- C. deer, human, snowmobile, dog
- D. deer, snowmobile, human, dog

34. The **best** inference that can be made from the diagram is that

- A. the snowmobile broke through the fence
- B. the snowmobile carried two people
- C. the deer jumped over the fence
- D. the man chased the dog

*Use the following information to answer question 35.*

The police find the following set of fingerprints on a cash register after a robbery.



35. The patterns on the fingerprints shown above, from left to right, are a
- A. loop, an arch, a loop, and an arch
  - B. loop, an arch, a loop, and a whorl
  - C. whorl, an arch, a whorl, and an arch
  - D. whorl, an arch, a whorl, and a loop

Use the following information to answer question 36.

A teacher receives an assignment without a name on it. Four students claim ownership of the assignment. The teacher asks them to write a sentence on a piece of paper. She then compares the sentences with the assignment to determine which student the assignment belongs to.

#### Sample of Writing from Assignment

*Satellites are used to help predict weather  
and observe space.*

*They also pass on phone and TV signals.*

#### Samples of Writing from Students

Student 1 *The quick brown fox jumps over the lazy dog.*

Student 2 *The quick brown fox jumps over the lazy dog.*

Student 3 *The quick brown fox jumps over the lazy dog.*

Student 4 *The quick brown fox jumps over the lazy dog.*

36. The assignment belongs to

- A. student 1
- B. student 2
- C. student 3
- D. student 4

Use the following information to answer question 37.

**Statements Based on an Animal's Tracks**

**Statement 1** This animal can climb trees.

**Statement 2** This animal has a claw on each toe.

**Statement 3** This animal has four legs.

**Statement 4** This animal is a raccoon.



37. Which of the following statements are observations?

- A. 1 and 3
  - B. 1 and 4
  - C. 2 and 3
  - D. 2 and 4
- 

Use the following information to answer question 38.

Coyotes, willows, squirrels, and snowshoe hares are all part of a particular forest ecosystem.

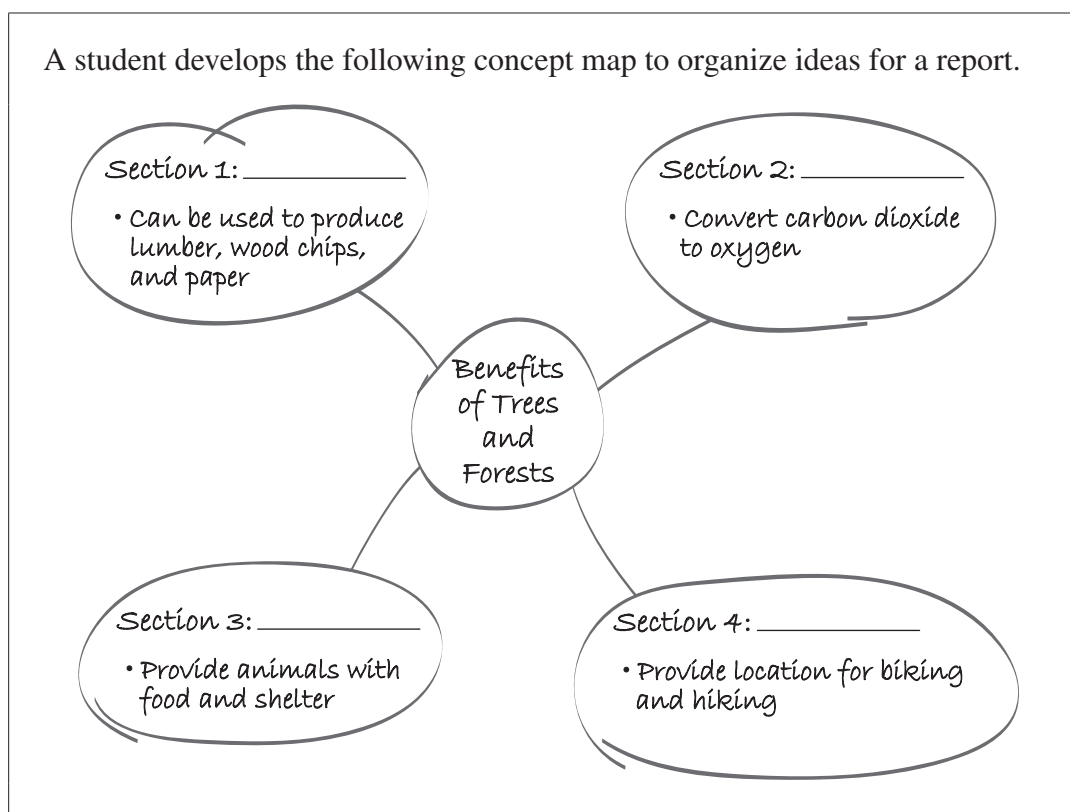
38. Which of the following food chains is a possible food chain for the organisms in this forest?

- A. Sun → Coyote → Snowshoe hare → Willow
  - B. Sun → Willow → Snowshoe hare → Coyote
  - C. Sun → Squirrel → Snowshoe hare → Coyote
  - D. Sun → Willow → Snowshoe hare → Squirrel
- 

39. Spruce trees survive periods of drought better than poplar trees because spruce trees

- A. are taller than poplar trees
- B. are shorter than poplar trees
- C. transpire less than poplar trees
- D. transpire more than poplar trees

Use the following information to answer questions 40 and 41.



40. Which of the following rows shows the appropriate titles for each of the sections in the student's concept map?

Row	Section 1	Section 2	Section 3	Section 4
A.	Life Support	Raw Materials	Habitat	Recreation
B.	Life Support	Raw Materials	Recreation	Habitat
C.	Raw Materials	Life Support	Habitat	Recreation
D.	Raw Materials	Life Support	Recreation	Habitat

41. Which two sections of the student's report will **most likely** discuss photosynthesis?

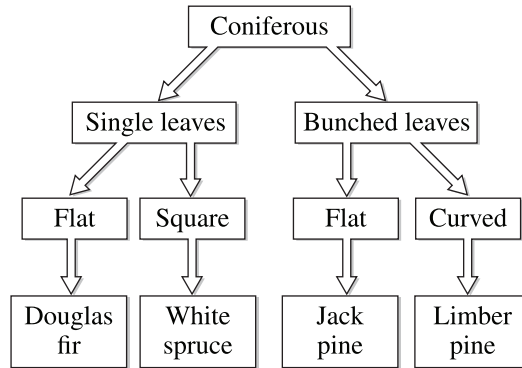
- A. Sections 1 and 3
- B. Sections 1 and 4
- C. Sections 2 and 3
- D. Sections 2 and 4

Use the following information to answer question 42.

Dan examines the leaves of two different coniferous trees in his yard.

<b>Tree I</b>	Has flat, bunched leaves
<b>Tree II</b>	Has square, single leaves

He tries to identify the two trees using the following key.



42. Which of the following rows identifies the two trees?

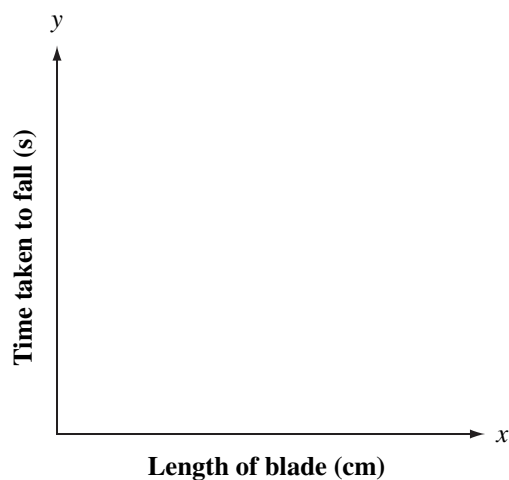
Row	Tree I	Tree II
A.	Jack pine	White spruce
B.	Jack pine	Limber pine
C.	Douglas fir	White spruce
D.	Douglas fir	Limber pine

43. From which part of a tree is most water lost?

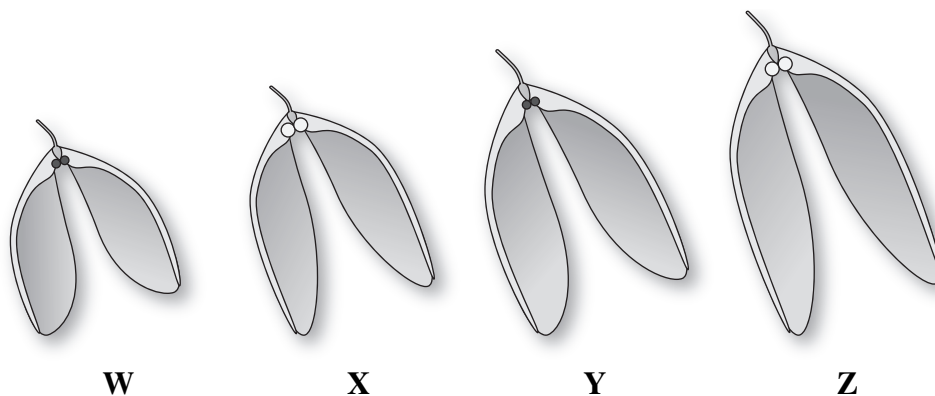
- A. Roots
- B. Trunk
- C. Leaves
- D. Branches

Use the following information to answer questions 44 and 45.

Samantha is investigating the length of time that it takes for maple seeds with blades of different sizes to fall. Her goal is to produce data that can be plotted on the graph shown below.



Samantha selects the following four seeds for her investigation.



44. Which of the following variables should be controlled in Samantha's investigation?
- A. Mass of the seeds
  - B. Length of the seed blades
  - C. Time taken for each seed to fall
  - D. Height from which the seeds are dropped

Use the following additional information to answer question 45.

Samantha proposes the following four procedures for her investigation.

### List of Four Procedures

○ Procedure 1

Measure the length of each blade.

○ Procedure 2

Measure the mass of each seed.

○ Procedure 3

Drop all four seeds at the same time and record which one touches the ground first.

○ Procedure 4

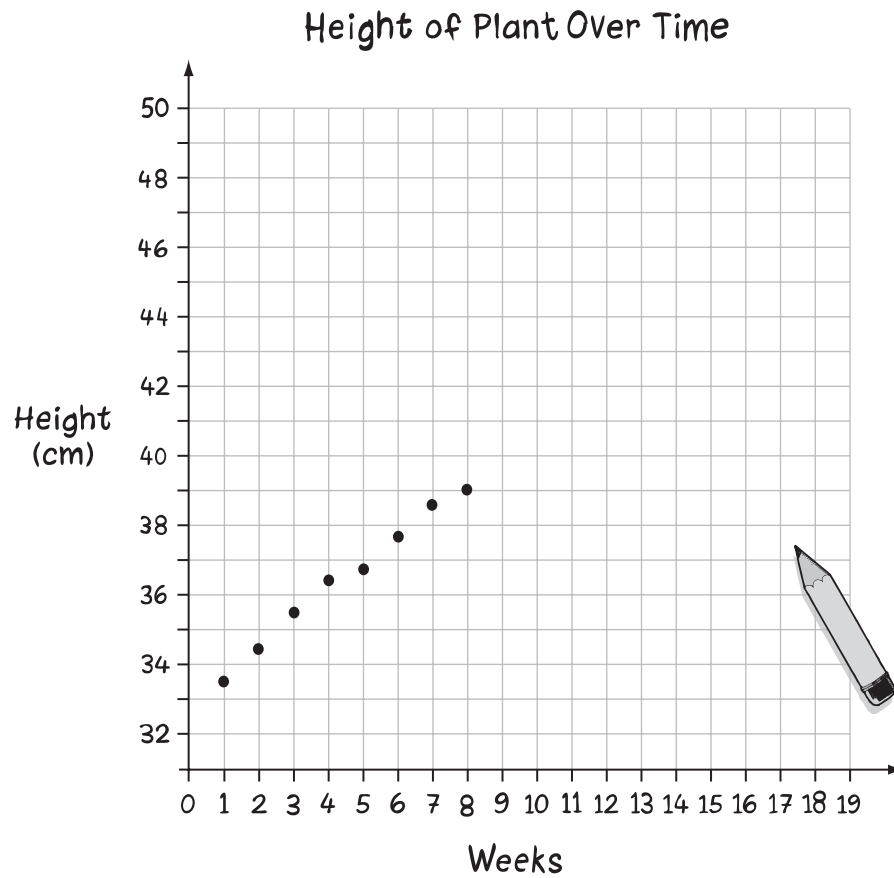
Drop each of the four seeds separately and measure the time that it takes for each seed to touch the ground.

45. Which of the above procedures used together will provide the student with the data necessary to complete the graph shown on the previous page?
- A. Procedures 1 and 3
- B. Procedures 1 and 4
- C. Procedures 2 and 3
- D. Procedures 2 and 4



Use the following information to answer question 46.

A student has begun to graph the results of an experiment. The experiment involves measuring the height of a plant every week for eight weeks.



46. Between week 3 and week 8, the height of the plant increased by approximately
- A. 3.0 cm
  - B. 3.5 cm
  - C. 38.5 cm
  - D. 39.0 cm

47. Most deciduous trees produce   *i*   and have   *ii*   leaves.

The statement above is completed by the information in row

Row	<i>i</i>	<i>ii</i>
A.	cones	needle
B.	cones	broad
C.	flowers	needle
D.	flowers	broad

48. Which of the following organisms is a producer?

- A. Ant
- B. Grass
- C. Mushroom
- D. Earthworm

*Use the following information to answer question 49.*

A local government has decided to convert a nature preserve into a golf course and a skating rink. Four citizens have expressed their opinions on the project.

**Citizen I**     “I am opposed to the decision because development will eliminate the natural habitat of many animals.”

**Citizen II**    “I am in favour of the decision because development will lead to an increase in tourism.”

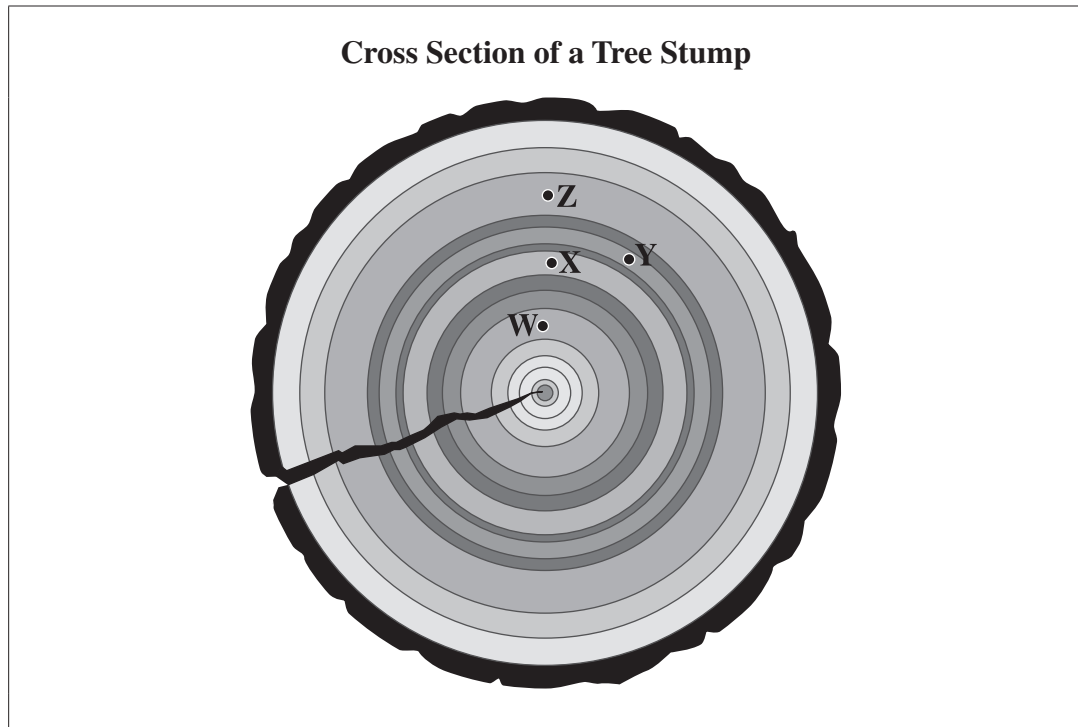
**Citizen III**   “I am opposed to the decision because development will ruin the look of the area.”

**Citizen IV**    “I am in favour of the decision because development will allow new varieties of trees to grow.”

49. Which citizen is **most likely** a member of an environmental group?

- A. Citizen I
- B. Citizen II
- C. Citizen III
- D. Citizen IV

Use the following diagram to answer question 50.



50. Which letter represents the year with the most favourable growing conditions?

- A. W
- B. X
- C. Y
- D. Z

## ***2008 Test Blueprint and Item Descriptions***

The following blueprint shows the reporting categories and topics by which questions were classified on the 2008 Grade 6 Science Achievement Test.

<b>Topic</b>	<b>Question Distribution by Reporting Category</b>		<b>Number (Percentage) of Questions</b>
	<b>Knowledge</b>	<b>Skills</b>	
<b>Inquiry and Problem Solving</b>	<b>0</b>	<b>11</b> (6, 16, 17, 25, 28, 30, 34, 37, 44, 45, 46)	<b>11 Questions</b> (22% of Total Test)
<b>Air, Aerodynamics, and Flight</b>	<b>9</b> (1, 2, 5, 7, 10, 11, 12, 13, 14)	<b>5</b> (3, 4, 8, 9, 15)	<b>14 Questions</b> (28% of Total Test)
<b>Sky Science</b>	<b>4</b> (18, 20, 21, 22)	<b>4</b> (19, 23, 24, 26)	<b>8 Questions</b> (16% of Total Test)
<b>Evidence and Investigation</b>	<b>2</b> (29, 35)	<b>5</b> (27, 31, 32, 33, 36)	<b>7 Questions</b> (14% of Total Test)
<b>Trees and Forests</b>	<b>5</b> (38, 39, 43, 47, 48)	<b>5</b> (40, 41, 42, 49, 50)	<b>10 Questions</b> (20% of Total Test)
<b>Number (Percentage) of Questions</b>	<b>20 Questions</b> (40% of Total Test)	<b>30 Questions</b> (60% of Total Test)	<b>Total Test 50 Questions</b> (100%)

The table below provides information about each question on the 2008 test: the keyed response, the difficulty of the item (the percentage of students who answered the question correctly), the reporting category, the topic, and the item description.

Question	Reporting Category	Key	Difficulty (%)	Topic	Item Description
1	Knowledge	A	85.8	Aerodynamics & Flight	Identify which force has the greatest impact on the downward movement of a falling body
2	Knowledge	B	75.3	Aerodynamics & Flight	Identify an example situation where air is being compressed
3	Skills	C	77.3	Aerodynamics & Flight	Describe the change in composition of air in an ant farm when outside air is not permitted to enter
4	Skills	A	50.3	Aerodynamics & Flight	Determine the relationship between air pressure and gravity in an experiment
5	Knowledge	C	57.1	Aerodynamics & Flight	Recognize the function of fins found on rockets
6	Skills	D	74.1	Inquiry & Problem Solving	Analyze a chart to draw a scientific conclusion
7	Knowledge	A	60.5	Aerodynamics & Flight	Explain how air resistance affects the fall of a parachute
8	Skills	A	57.1	Aerodynamics & Flight	Describe the reason why a hot-air balloon model floats when the air it contains is heated
9	Skills	B	70.2	Aerodynamics & Flight	Compare bridge support designs and identify that which is most streamlined
10	Knowledge	B	55.0	Aerodynamics & Flight	Recognize the characteristics that define Bernoulli's principle
11	Knowledge	D	60.1	Aerodynamics & Flight	Identify the control surface of a plane that controls yaw
12	Knowledge	C	71.9	Aerodynamics & Flight	Identify the location of the elevator on a plane
13	Knowledge	A	50.2	Aerodynamics & Flight	Identify the settings of the control surfaces of a glider that would help maintain a continuous roll
14	Knowledge	B	59.8	Aerodynamics & Flight	Identify the airplane structure in which the rudder is located
15	Skills	D	58.1	Aerodynamics & Flight	Make an inference that compares the properties of compressed to uncompressed air particles
16	Skills	D	73.9	Inquiry & Problem Solving	Determine the trend in a table

Question	Reporting Category	Key	Difficulty (%)	Topic	Item Description
17	Skills	C	73.9	Inquiry & Problem Solving	Analyze a chart to determine how long it takes Saturn to revolve around the sun
18	Knowledge	B	69.4	Sky Science	Identify the sun as the source of light that enables celestial bodies to be seen in the night sky
19	Skills	A	68.9	Sky Science	Illustrate the positions of objects in a solar system model that would produce a solar eclipse
20	Knowledge	B	78.1	Sky Science	Recognize the phases of the moon over one month
21	Knowledge	D	74.7	Sky Science	Describe the apparent movement of constellations in the night sky relative to Earth
22	Knowledge	B	66.0	Sky Science	Recognize the planet that is larger than Earth
23	Skills	C	55.8	Sky Science	Predict the number of daylight hours at a particular location given a table that indicates daylight hours during each solstice
24	Skills	D	50.4	Sky Science	Determine the orientation of the Big Dipper in each season
25	Skills	C	80.7	Inquiry & Problem Solving	Predict the missing sunset and sunrise times when given a pattern
26	Skills	D	57.6	Sky Science	Determine the position on a model that represents the moon in its last quarter
27	Skills	A	72.3	Evidence & Investigation	Use a table outlining the description of foot imprint and length of stride to identify the track in which walking takes place
28	Skills	B	50.4	Inquiry & Problem Solving	Analyze a chromatography experiment and determine the responding variable
29	Knowledge	D	72.2	Evidence & Investigation	Identify a method that helps make the collection of fingerprint evidence easier
30	Skills	B	60.0	Inquiry & Problem Solving	Analyze a crime scene accurately to make an observation
31	Skills	C	77.3	Evidence & Investigation	Analyze a soil classification table to infer the prior location of a person
32	Skills	A	80.9	Evidence & Investigation	Analyze a diagram of human and animal tracks and provide an observation
33	Skills	B	54.9	Evidence & Investigation	Evaluate four sets of tracks to determine the order in which they were made

Question	Reporting Category	Key	Difficulty (%)	Topic	Item Description
34	Skills	C	89.1	Inquiry & Problem Solving	Evaluate four sets of tracks and make an inference based on the evidence provided by the tracks
35	Knowledge	D	71.3	Evidence & Investigation	Identify the fingerprint formula of a suspect at a given crime scene
36	Skills	C	72.0	Evidence & Investigation	Evaluate handwriting samples to identify the source of a document
37	Skills	C	73.4	Inquiry & Problem Solving	Analyze four statements and identify two statements that are observations
38	Knowledge	B	58.5	Trees & Forests	Identify which food chain best represents a particular forest ecosystem
39	Knowledge	C	53.3	Trees & Forests	Identify the attribute of coniferous trees that enables them to survive drought better than deciduous trees
40	Skills	C	80.5	Trees & Forests	Determine titles for four sections of a concept map that lists several benefits of trees and forests
41	Skills	C	70.7	Trees & Forests	Use a concept map to determine which sections of a report will most likely incorporate information about photosynthesis
42	Skills	A	77.8	Trees & Forests	Determine the names of two trees by using an identification key
43	Knowledge	C	64.1	Trees & Forests	Identify the part of a tree through which most water is lost
44	Skills	D	51.5	Inquiry & Problem Solving	Identify a controlled variable in a given investigation
45	Skills	B	46.9	Inquiry & Problem Solving	Determine from a list the appropriate procedures that are necessary to perform a given experiment
46	Skills	B	66.1	Inquiry & Problem Solving	Interpret information shown on a graph to determine the growth of a plant over a given time
47	Knowledge	D	54.6	Trees & Forests	Identify characteristics of deciduous trees
48	Knowledge	B	53.9	Trees & Forests	Recognize an example of a producer
49	Skills	A	70.6	Trees & Forests	Determine the perspective represented by an environmental group
50	Skills	D	74.6	Trees & Forests	Analyze a cross section of a tree and infer when growing conditions were the most favourable